Abdominal Aortic Aneurysm FAQs

What is an Abdominal Aortic Aneurysm (AAA)?

The aorta is the major blood vessel that supplies blood to the body. An abdominal aortic aneurysm (AAA) is a weakened and bulging area in the lower part of the aorta. The aorta, about the diameter of a garden hose, runs from your heart through the center of your chest and abdomen. Because the aorta is the body's main supplier of blood, a ruptured abdominal aortic aneurysm can cause life-threatening bleeding. Although you may never have symptoms, finding out you have an abdominal aortic aneurysm can be frightening. Most small and slow-growing abdominal aortic aneurysms don't rupture, but large, fast-growing abdominal aortic aneurysms may.

Who is at risk for AAA?

Individuals are considered to be at higher risk of an abdominal aortic aneurysm and should consider a noninvasive screening if they fall into one of the following categories:

- Men over 65
- Men over 55 with family history of AAA and/or history of smoking
- Women over 65 with family history of AAA and/or history of smoking

Other factors that increase the risk of developing an abdominal aortic aneurysm include:

- Hypertension (high blood pressure)
- Coronary artery disease
- High cholesterol
- Chronic obstructive pulmonary disease (COPD)

What are the treatment options for AAA?

Depending on the size and rate at which the aortic aneurysm is growing, treatment may vary from watchful waiting to emergency surgery. Once an abdominal aortic aneurysm is found, doctors will closely monitor it so that a procedure can be planned if it is necessary. An elective procedure for aneurysm repair may be likely and carries much less risk than an emergency surgery for a ruptured abdominal aneurysm.

When should surgery be considered to repair an AAA?

Many factors are considered when determining whether procedure is needed:
What does surgery to repair AAA involve?

There are two methods commonly used to repair an AAA – open surgery or endovascular aneurysm repair (EVAR). Your physician will help you decide which treatment option is best for you to repair your aneurysm. Factors that influence the method of repair include your age, health and the anatomy of the aneurysm.

Open Surgery

The surgeon will perform the repair under general anesthesia. After you have been given the general anesthesia, the surgeon will access the aneurysm through a long incision in the abdomen. The normal sections of the aorta above and below the diseased segment are clamped, and the aneurysmal segment is opened. A graft constructed of synthetic material is positioned inside the artery in the aneurysm and fastened in place with sutures or stitches to function as a new aorta. This procedure alleviates the pressure building on the compromised aorta and replaces or repairs the area of the diseased aorta.

Endovascular Aneurysm Repair

When the anatomy is appropriate, the aneurysm can be repaired using a minimally invasive technique called endovascular aneurysm repair (EVAR). With EVAR, the physician will access the aneurysm through two small incisions in the groin. A device called an endograft is delivered to the proper location through a catheter, or small-diameter tubing. Proper placement of the endograft allows for blood to be adequately supplied to the legs once again. This method can be done under general anesthesia or with a local anesthetic. EVAR offers quicker recovery and less overall risk.

Indiana University Health has emerged as a national leader for treating the most complex aneurysms, such as aneurysms affecting the blood supplied to the kidneys. IU Health Vascular is the only center in Indiana, and one of only a few in the United States, with the ability to treat these complex aneurysms with the EVAR technique. Previously, open surgery was the only option for patients with complex anatomies. The IU Health Vascular team includes academic faculty from the Indiana University School of Medicine. This close connection allows access to the most innovative treatment options for AAA repair.

What can I expect after AAA surgery?
Open surgery requires five to seven days in the hospital after the procedure and six to eight weeks for a full recovery. The EVAR method requires one to two days of hospital stay and three to four weeks for full recovery. You should not do any lifting or driving after the procedure until cleared by your physician. Restrictions will vary from patient to patient.

What are possible complications of AAA surgery?

Your doctor will discuss the risks and benefits of both the endovascular and open repair approaches. However, not all patients are candidates for endovascular repair. At the same time, not all patients are ideal candidates for an open repair. As with any surgical procedure, surgical repair of AAA includes risks. Potential complications include heart-related problems, swelling or infections at the site, or respiratory or urinary infections. More serious problems are rare but may include colon problems, kidney problems, or even more rare, paralysis and limb problems.

How do I know if I have AAA?

Typically, an abdominal aortic aneurysm does not produce any symptoms. However, when symptoms do arise, sharp pains in the abdomen or back are common. This pain is sometimes accompanied by abnormal pulsations in the abdomen. A careful palpation, or feeling of the abdomen, can be done by a physician to detect an AAA, but an abdominal ultrasound or CT scan is most reliable in detecting the condition.

What can I do to prevent AAA?

The best method of prevention is to live a heart-healthy lifestyle. You can lower your risk for heart disease by eating a healthy, balanced diet, monitoring blood pressure and cholesterol, staying smoke free, maintaining a healthy weight and exercising on a regular basis. A screening after the age of 55 is highly recommended. If an aneurysm is found, regular screenings to closely monitor the aorta are recommended. Screenings every ten years are recommended if an aneurysm is not found during an initial screening. Under the Screening Abdominal Aortic Aneurysms Very Efficiently Act (SAAAVE), Medicare offers a free, one-time, AAA screening. Please contact our offices to see if you are eligible for a free screening.

Why choose IU Health for management or treatment of AAA?

As one of the highest volume heart and vascular programs in the nation, IU Health Cardiovascular excels at handling conditions from the most common to the most complex. Care is coordinated by multidisciplinary teams, who offer greater expertise at every stage of treatment. The close relationship with the IU School of Medicine allows access to clinical trials and the most innovative vascular
treatments. Our vast depth and breadth of expertise provide comprehensive care for a full range of vascular conditions. The comprehensive approach of IU Health cardiovascular includes a broad range of specialists available to fit the needs of each individual.